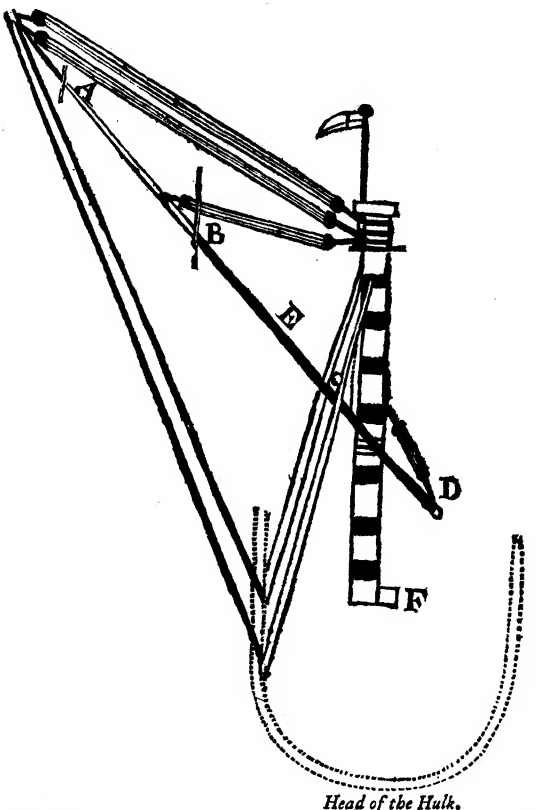
III. *Part of a Letter from* John Huxham, *M. D. F. R. S. to* W. Watſon, *F. R. S. in relation to the Effects of Lightning at* Plymouth.

Read Jan. 9, 1759. SUnday, December 15, 1754, twenty-five minutes after one P. M. a vaſt body of lightning fell on the great hulk at Plymouth-dock, which ſerves to hoiſt in and fix the maſts of the men of war. You may have ſome idea of it by this ſcheme, which was ſent me by the lieutenant of the Peregrine, which lay cloſe by the hulk, who ſaw it. It burſt out about a mile or two to the weſtward of the hulk, and ruſhed with incredible velocity towards it. The piece of the Derrick cut out was at leaſt eighteen inches diameter, and about fifteen or ſixteen feet long: this particular piece was in three or four places begirt with iron hoops about two inches broad, and half an inch thick, which were completely cut in two by the lightning, as if done by the niceſt hand and inſtrument. Two days after the accident I went on board myſelf, and examined the matter, and have added what I further obſerved.

The lightning was immediately ſucceeded by a dreadful peal of thunder, and that forthwith by the moſt violent ſhower of hail I ever ſaw in England, which fell only in and about this town, for a mile or two: there was very little of it at the dock, though only two miles diſtant. The hail-ſtones were as big as ſmall nutmegs, much of the ſhape of ſome ſort of beads cut into ſquares, a kind of a dodecahedra, quite pellucid as the cleareſt ice, with only a white ſpeck in the middle, about the bigneſs of a pea. But that, for which I chiefly mention the whole, is, that

that they were all very nearly of the ſame bigneſs and figure. I examined thouſands of them, as well as many other perſons, who all found this ſimilarity in ſize and form: they meaſured, immediately after they fell, near two inches round. I think this great uniformity in the ſhape of the hail muſt be owing to ſome ſaline principle, that determined the configuration. The uniform ſtellate form of ſnow is very remarkable, and ſeems owing to the nitro-aerious ſalt. Every one knows ſalts ſhoot into particular forms: and when the ſalts are compounded, the figure participates of both, as is ſeen in what is called the quadrangular nitre.



Head of the Hulk.

December 15, half paſt 1, P. M. wind S. W.

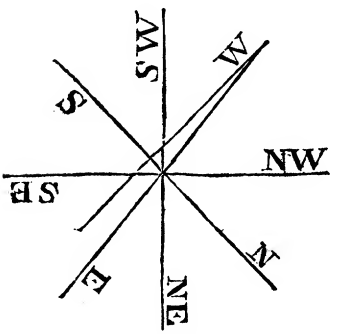
A to *B*, Cut all away by lightning.

C, The maſt ſprung by ditto, into the heart.

D, The laſhing, forced by the ſhock off the Derrick's end, tho' the laſhing round the maſt was ſound and faſt.

E, The Derrick, (or Direct), out of which a piece from *A* to *B* was cut off by the lightning: round this piece were three or four iron hoops, as deſcribed, which were cut aſunder. The Derrick was at leaſt eighteen inches diameter.

F, The chain-pump, ſplit quite thro' by the lightning.



I do not know what the gentleman means by this. The wind was W. S. W. the lightning came from due weſt.

IV. *A remarkable Caſe of a morbid Eye: By Mr.* Edward Spry, *Surgeon, at* Plymouth, *in* Devonſhire.

June 1751.

Read Jan. 9. 1755.

MARY the wife of Thomas Smaldridge, a mariner of Plymouth, complained to me of a violent pain in her left eye, and ſometimes of very acute pains in the temple of the ſame ſide, with ſome defect in her ſight. She alſo imagined that her eye was bigger than ordinary; but, upon inſpection, it appeared no bigger than the other.

The